

PTACEK, M.; PAZDEFAK, J.

"French system of color television. p. 88."

SDELOVACI TECHNIKA. Praha, Czechoslovakia. Vol. 7, No. 3, Mar. 1959.

Monthly list of East European Accessions (FEAI), LC, Vol. 8, No. 6, Jun 59, Unclas.

E/039/62/023/001/006/007
D291/0303

AUTHOR: Ptáček, Milan, Engineer
TITLE: Properties and problems of double amplitude-modulated transmission
PERIODICAL: Slaboproudý obzor, v. 23, no. 1, 1962, 45 - 50

TEXT: The article describes basic properties of double AM signals and problems connected with undistorted transmission, especially in color television, etc., where two or more independent signals are simultaneously transmitted over one common channel. Special attention is paid to influences on linear distortion, causing cross talk between transmitted signals. Equivalent transmission networks for calculating the cross-talk component are given, and possibilities are listed for cross-talk correction. The paper derives in its first part the spectral properties and signal composition in a double AM network, lists methods of detection (synchronous and double detection), derives the reduced form

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Z/039/62/023/001/006/007
B291/D303

Properties and problems of ...

of scanning functions for synchronous detectors without cross talk, and explains the origin of the dot structure in the image. In the second part, the paper describes the influence of linear distortion in the picture-transmission channel on the double AM transmission, lists the distortion of signals in SSB transmission and finally describes the use of double detection in a double AM system and formulates expression for the output voltage and the cross-talk voltage in such a system. In conclusion, the author lists two well-known methods for correcting cross talk: The first method uses a parallel correction voltage which precisely corresponds to the cross-talk voltage and is added, only in opposite polarity, to the transmitted signal prior to modulation. However, this correction method is very intricate and requires utmost precision as to the correction voltage. The second method uses a simplified correction voltage which comes from a second channel, and is partially added for adjustment of the modulation signal. There are 6 figures and 5 references, 3 Soviet-

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Card 2/3

Properties and problems of ...

Z/059/62/025/001/006/007
D291/0303

-bloc and 2 non-Soviet-bloc.

ASSOCIATION: Výzkumný ústav rozhlasu a televize, Praha (Research
Institute for Broadcasting and Television, Prague).

SUBMITTED: September 6, 1961

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Card 3/5

PTACEK, Milan, inz.

Problems and properties of double amplitude modulation transmission.
Slaboprouty obzor 23 no.1:45-50 Ja '62.

1.Vyskumny ustav rozhlasu a televize, Praha.

CZECH/14-59-3-6/29

6(6)

AUTHOR: Pazderák, Jiří, and Ptáček, Milan, Engineers

TITLE: French Systems of Color Television (Francouzské systémy barevné televize)

PERIODICAL: Sdělovací technika, 1959, Vol 7, Nr 3, pp 88-92 (Czechoslovakia)

ABSTRACT: This article reviews recent developments in French color television. There are 11 diagrams and 4 references, 3 of which are French and 1 English.

Card 1/1

30599
Z/039/61/022/012/002/009
D291/D306

6.6000

AUTHOR:

Ptáček, Milan, Engineer

TITLE:

Experimental determination of permissible narrowing
of the frequency band for transmitting color informa-
tion according to the OIRT television standard

PERIODICAL: Slaboproudý obzor, v. 22, no. 12, 1961, 720-724

TEXT: The article evaluates permissible narrowing of the frequency band for transmitting color information in the form of R - Y and B - Y difference signals, with regard to the standard value of 1.6 megacycles/sec/6 dB prescribed for color TV transmission by the OIRT television standard. While several previous papers engage in determining the frequency necessary for transmitting color information, this paper specializes in determining the so-called color-difference-dot discrimination power. This is a determination of changes in the sensation of color-transition contrasts in the image depending on slight changes in the frequency band for color-information transmission. This determination was made experimentally in

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Experimental determination of ...

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D291/D306

a test circuit by subjective evaluation of the image obtained on a color signal monitor. Color signals were obtained either from a color-breakup generator, or from a VURT color-positive televising system using four American SMPTE slides. In the tests, a coding matrix unit was used to transform primary-color signals R' , G' , B' into different signals $R' - Y'$, $B' - Y'$ and the luminance signal Y' . The frequency band of the different signals was limited by a subsequent filter unit, and the time coincidence of all three components on the output was restored by the time-delay of the luminance signal. The test results are summarized as follows: (1) The existence of various color-difference-dot discrimination power in colorimetric axes $R - Y$ and $B - Y$ could be verified and determined as well as their dependence on the luminance contrast; (2) under the provisions of the OIRT television standard, the average permissible narrowing of the frequency band for transmitting $R - Y$ and $B - Y$ signals was found, and that region determined where the impaired color-dot-discrimination is not yet noticed by the average viewer. To guarantee a high quality of color-breakup transmission by $R - Y$ and $B - Y$ difference signals of the same frequency

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Experimental determination of ...

³⁰⁵⁹⁹
Z/039/61/022/012/002/009
D291/D306

band width of 1.6 megacycles/sec/6 dB, the maximum permissible narrowing is 1.32 megacycles/sec/6 dB in the R - Y axis and 1.17 megacycles/sec/6 dB in the B - Y axis; (3) the average value of narrowing the frequency band for color information transmission, causing a threshold decrease of the image's color contrast, was determined with the aid of the static-color-image criterion. As a result, a threshold decrease was found at 0.93 megacycles/sec/6 dB with very slight deviations in either axis. There are 5 figures, 7 tables, and 9 references: 3 Soviet-bloc and 6 non-Soviet-bloc. The references to the 4 most recent English-language publications read as follows: A. V. Bedford: Mixed highs in color television. Proc. IRE, 1950, no. 9, pp. 1003-1009; K. McIlwain: Requisite color bandwidth for simultaneous color television system. Proc. IRE, 1952, no. 8, pp. 909-912; K. Hacking: The choice of chrominance axes for color television. Acta Electronica, 1957-58, no. 1-2, pp. 87-94; Y. Peless, T. Murakami: Analysis and synthesis of transitional Butterworth-Thomson filters and bandpass amplifiers. RCA Review, 1957, no. 1, pp. 60-94.

Card 3/4

Experimental determination of ...

³⁰⁵⁹⁹
Z/039/61/022/012/002/009
D291/D306

ASSOCIATION: Výzkumný ústav rozhlasu a televize, Praha (Radio and
Television Research Institute, Prague)

SUBMITTED: June 13, 1961

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Card 4/4

PTACEK, Milan, inz.

The effect of phase deviations from precise quadrature modulation on color distortion of large picture areas. Slaboproudý obzor 21 no.6: 336-340 Je '60. (EEAI 9:10)

1. Vyzkumny ustav rozhlasu a televize, Praha.
(Color television)

PTACEK, Milan, inz., CSc.

Basic principles and properties of the SECAM color television.
Slaboproudý obzor 24 no.9:515-523 S '63.

1. Vyzkumny ustav rozhlasu a televize, Praha.

PTACEK, Milan, inz., CSc; PAZDARAK, Jiri, inz., CSc.

New basic improvement of the color television system. Sdel
tech ll no.11: 410-412 N'63.

PTACEK, Milan, inz., ScG.

Experimental encoder for color television system with quadrature modulation. Slaboprouhy obzor 24 no.5:272-279 My '63.

1. Vyzkumny ustav rozhlasu a televize, Praha.

6.6000

⁸⁰⁴⁵¹
Z/039/60/021/06/003/031
E140/E263

AUTHOR: Ptáček, M., Engineer

TITLE: The Effect of Phase Deviations From Precise Quadrature
Modulation on Colour Distortion of Large Picture Areas

PERIODICAL: Slaboproudý obzor, 1960, Vol 21, Nr 6, pp 336-340

ABSTRACT: Colour distortion is most disturbing in large picture areas, i.e. in the steady state. Chrominance axes R-Y and B-Y are considered. The calculation is carried out in three steps: a general expression for errors in terms of the transmitted signals, the choice of suitable colours for estimating distortion, subjective estimation of the distortion with respect to errors in the transmitted signals. It is found that the admissible tolerance is approximately the same for both axes and for the overall channel is approximately ± 50 . There are 7 figures and 5 references, 2 of which are Czech, and 3 English.

ASSOCIATION: Výzkumný ústav rozhlasu a televize, Praha
(Broadcasting and Television Research Institute, Prague)

SUBMITTED: February 24, 1960

Card 1/1

PTACHE, Milan. 102. 010.

The ART color television system. Slaboproudy obzor 25
no.11:673-674 N '64.

L 42248-00 FSS-2

ACC NR: AP6031553

SOURCE CODE: CZ/0039/65/026/009/0505/0513

AUTHOR: Ptacek, Milan (Engineer; Candidate of sciences)

ORG: Research Institute of Broadcasting and Television, Prague (Vyzkumny ustav rozhlasu a televize)

TITLE: DST color television system 6

SOURCE: Slaboproudny obzor, v. 26, no. 9, 1965, 505-513

TOPIC TAGS: color TV, TV system

ABSTRACT: The article states the basic principles, arrangements of the new Dot Sequential Transmission (DST) system of color television as designed and experimentally verified at the Research Institute of Broadcasting and Television. The system uses FM for the transmission of color information, thus rendering the system insensitive toward nonlinear distortion originating from differential gain and differential phase. In contrast with the SECAM system the present one does not need an ultrasonic delay line in the color television receiver decoder. Orig. art. has: 11 figures and 4 formulas. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 17 / SUBM DATE: 05May65 / ORIG REF: 008 / OTH REF: 006

Card 1/1

UDC: 621.397.535.6

PTACEK, Miroslav, inz.; VESELA, Vera, inz.

Requirements on studio microphone properties. Sdel tech 12
no.5:178-181 My '64.

PTACEK, MIROSLAV

Zaklady dynamiky. [Vyd. 1.] Praha, Statni pedagogicke nakl., 1953. 74 p.
(Ucebni texty vysokych skol) [Fundamentals of dynamics. diagrs.]

SO: Monthly List of East European Vol. 3, No. 3
Library of Congress, March 1953⁴, Uncl.

PTACEK, MIROSLAV

Stavebni mechanika. [Vyd. 1.] Praha, Statni pedagogicke nakl., 1953. (Ucebni texty v.
vysokych skol) Building mechanics. Vol. 1, pt. 2. Kinematic calculation of resultant
lines. Diagr.

SO: Monthly List of East European Accessions, vol. 3, No. 2, Library of Cong., Feb. 1954, Uncl.

PTACEK, Miroslav, inz.

"Low-frequency and electro-acoustical measurements" by
Ales Boleslav. Reviewed by Miroslav Ptacek. Sdel tech 9 no.12:
480 D '61.

PTACEK, Miroslav, inv.

Sensitivity of a "beam" microphone with a reliable directional response.
Synopsis: 17 pages 25 refs. (Ref. 1-69) D. 1-4.

1. Research and Development Institute of Electroacoustics, Prague of
the Tesla Pardubice Machine Enterprise. Submitted February 14,
1964.

PTACEK, PAZDERAK.

"Recording of television signal on tape." p. 192.

SLABOPROUDY OBZOR. (MINISTERSTVO PRESNEHO STROJIRENSTVI, MINISTERSTVO SPOJU A VEDECKA TECHNICKA SPOLECNOST PRO ELEKTROTECHNIKU PRI CSAV.) Praha, Czechoslovakia, Vol. 20, no. 3, Mar. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.
Uncl.

PTACEK, V.

SCIENCE

Periodicals: BIULETEN ASTRONOMICIESKIKH INSTITUTOV CHESHOSLOVAKII
BULLETIN OF THE ASTRONOMICAL INSTITUTES OF CZECHOSLOVAKIA.
Vol. 10, no. 2, Mar. 1959

PTACEK, V. Reflection of radio waves by the ionosphere between Prague and
Tokyo. In english. p. 79.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5,
May 1959, Unclass.

PTACEK, V.

CZECHOSLOVAKIA/Radio Physics - Propagation of Radio Waves. I

Abs Jour : Ref Zhur Fizika, No 1, 1960, 1736

Author : Ptacek, V.

Inst : Astronomy Institute, Academy of Sciences, Prague,
Czechoslovakia

Title : Reflection of Radio Waves by the Ionosphere Between
Prague and Tokyo

Orig Pub : Byul. astron. in-tov chekhoslavakii, 1959, 10, 1
Masta, No 2, 79

Abstract : Since April 1958, measurements of the time of propa-
gation of the time-service signals, transmitted from
Tokyo were carried out in Prague (distance 9077 km).
The measurements were carried out essentially at a
frequency of 18,570 Mcs, twice a week. The average
time of propagation was found to be approximately 32

Card 1/2

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CZECHOSLOVAKIA/Radio Physics - Propagation of Radio Waves.

I

Abs Jour : Ref Zhur Fizika, No 1, 1960, 1736

milliseconds. Using data on the altitude of the F_2 layer on the route of propagation, the author has calculated the number of jumps of the ray along the route. On the basis of 80 measurements, a seasonal course of the number of jumps is determined, and is found to have a minimum in the summer (three jumps) and a maximum in the winter (eight jumps).
-- A.A. Gorozhakina

Card 2/2

Z/057/62/000/002/009/015
E192/E382

AUTHOR: Ptáček, V.
TITLE: Investigation of the long-term stability of frequency standards

PERIODICAL: Československy časopis pro fysiku, no. 2, 1962,
157 - 159

TEXT: When studying the long-term stability of high-quality frequency standards, it is necessary to compare them with a stable system. One of the basic oscillators of the Czechoslovak time station (international standard for broadcasting and television organisations) has been in operation since August 25, 1954 and until February 1, 1956 it had been compared with the Greenwich system and since then with the international system TU2. As soon as the International Time Centre in Paris issues corrections to its TU2 system, the relative frequency deflections are evaluated over 5-day intervals. Six values of deviation are then used to determine a 30-day deviation. However, in order to determine only long-term changes, the 30-day figures are suitably

Card 1/2

PTACEK, V.

Some characteristics of acathode-coupled multivibrator, p. 77,
SDELOVACI TECHNIKA (Ministerstvo Strojirenstvi) Praha, Vol. 3, No. 3,
Mar. 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December 1955

PTACEK, V.

"Conference in Frequency Standards of Their Standardization Frequency and Impulse Dividers."
By V. Ptacek.

SO: CZECHOSLOVAK JOURNAL OF PHYSICS, Vol. 4, No. 1, Feb., 1954

Ptacek, V.
POLAND/General Section - Measurements. Laboratory. Techniques.

A-6

Abs Jour : Referat Zhur - Fizika, No 1, 1958, 136

Author : Ptacek, Vladimir

Inst :

Title : Methods for the Control of Quartz Clocks.

Orig Pub : Postepy astron., 1957, 5, No 2, 71-73

Abstract : Contents of a paper, delivered at the Joint Conference of
Czechoslovak and Polish astronomers, held in Wroclaw in
June 1956.

Card 1/1

Ptacek

Czechoslovakia /Chemical Technology. Chemical Products H-5
and Their Application
Water treatment. Sewage water.

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1797

Author : Drabek, Hruska, Nosek, Ptacek, Solin

Title : Purification of Phenolic Sewage Water of Brown
Coal Gasification

Orig Pub: Voda, 1956, 35, No 10, 342-347

Abstract: Description of the purification in cinder filters.
On new filters a process of adsorption takes
place, on filters which have been in operation --
a process of oxidation, with O₂ of the air. The
cinders act as catalyst. Depth of the cinder bed
is of 2-2.5 cm. The sewage water is fed at a uni-
form rate onto the cinder surface from a height of
about 1.5 meters. Technical details are described.

Card 1/1

PTACHE, Vinces, int.

Refinement of organoleptic properties and their effect on the
product quality determination. Prum potravín 15 no.11:595
N 164.

1. Vitana National Enterprise, Bysice.

SVEJDA, J., Doc., Dr.; HRDLICKA, M.; PTACKOVA, B.

Phase contrast microscopy in examination of surface biopsies
in carcinoma of the cervix. Cesk. gyn. 21-35 no.1:16-19
Feb 56.

1. Ustav pro path. anat. MU v Brne, prednosta prof.
Dr. V. Neumann. Onkologicky ustav v Brne.

(CERVIX, UTERINE, neoplasms,

diag., surface biopsy, phase contrast microscopy
exam. of biopsy material. (Cz))

(MICROSCOPY, PHASE,

of cervical biopsy material in diag. of cancer. (Cz))

(BIOPSY,

uterine cervix in diag. of cancer, phase microscopy
of biopsy material. (Cz))

KABELA, M.; PTACKOVA, Bl.

Injuries of the bladder and anus during radiotherapy of cervical cancer. Cesk.rentg.14 no.4:253-259 Ag'60.

1. Onkologicky ustav v Brne, reditel doc.dr. J. Sprindrich.
(BLADDER radiation eff)
(ANUS radiation eff)
(CERVIX NEOPLASMS radiother)
(RADIATION INJURY)

PTACKOVA, Blanka, MUDr.

~~Therapeutic considerations on cancer of the cervix uteri.~~
Cesk. gyn. 21 no.3:191-196 Apr 56.

1. Onkologicky ustav, Brno.
(CERVIX, UTERINE, neoplasms,
ther. (Cz))

PTACKOVA, Dana, promovana geoložka

Measurement of spring capacity on spillways. Geol pruzkum 5
no.4:117 Ap '63.

1. Geologicky pruzkum, n.p., Praha, zavod stavebni geologie.

$$\frac{1}{\sqrt{3}}$$

PRAT, V.; HATALA, M.; Technická asistence: PTÁČKOVÁ, M.; HNÁTEK, J.

Therapy of patients with chronic pyelonephritis with resistant bacteriuria by means of colimycin. Cas. lek. česk. 103 no.48: 1332-1337 N 27 '64.

1. Ústav pro choroby oběhu krve v Praze, (ředitel prof. dr. J. Brod, DrSc) a Ústav klinické a experimentální chirurgie v Praze, (ředitel prof. dr. B. Spacek, DrSc.).

ZIMAK, Vojtech, MUDr.; PTACKOVA, Vera, MUDr.

Severe course of diphtheria in the district of Usti n.L.
Prakt. lek., Praha 35 no.15-16:371-372 20 Aug 55.

1. Z inf. oddeleni OUNZ Teplice Lazne v C., primar MUDr.
Vojtech Zimak.

(DIPHTHERIA, epidemiology
in Czech., severe course in Usti n.L. region)

32565
S/081/62/000/006/111/117
B110/B101

11.9100

AUTHOR: Ptáček, Stanislav

TITLE: Comparison of some properties of rubbers vulcanized by means of sulfur and thermosetting resins. The influence of pervulcanization on the aging of vulcanized rubber

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 6, 1962, 693 - 694, abstract 6P571 (Kaučuk a plast. hmoty, no. 3, 1961, 76 - 81)

TEXT: Unfilled and carbon black mixtures of natural rubber and of butadiene styrene rubber SBR 1500 mixtures polymerized at low temperature were vulcanized by means of thermosetting alkylphenol formaldehyde resins. The vulcanizates obtained by reacting the polymer hydrocarbon with thermosetting resins in the presence of a catalyst are highly resistant to heat. Prolonged or high-temperature vulcanization by means of thermosetting resins, unlike sulfur vulcanization, causes little or no worsening of the properties of rubber made from butyl, natural rubber and SBR 1500. The vulcanization rate is proportional to the temperature and decreases in the presence of phenol-containing substances (diphenyl

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S/081/62/000/006/111/117
B110/B101

Comparison of some properties of...

guanidine, diphenyl-p-phenylenediamine etc.). In the presence of even small amounts of hexamethylenetetramine no reaction takes place. The elastic properties of rubbers obtained by means of resins are almost the same as those of sulfur vulcanizates. Because of their high heat resistance thermosetting-resin vulcanizates can be used when special elastomers are urgently required. The heat resistance of some tire elements could probably be improved by using such rubbers. With this method of vulcanization the utilization of factory capacity and the quality of the products can be improved. [Abstracter's note: Complete translation.]

X

Card 2/2

PTACOVSKY, K.

"Notes on the flora of the Bratislava area"

Biologické Prace. Bratislava, Czechoslovakia. Vol. 5, no. 2, 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 7, July 59, Unclass

PTACKOWSKI, K.

MARTINEK, J.; PTACKOWSKI, K. "Danger of stray currents in mines."

Uhlí, Praha, Vol 4, No 7, July 1954, p. 218

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

PTACOVSKY, K.

Sur Reservation near Svaty Jur. p. 257.

OCHRANA PRIRODY. Praha. Vol. 10, no. 9, Nov. 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

PTAK, E.

POL. 1

3431

00.0913:609.182

Bochenek J., Ptak E. The Change of Free Energy for Reactions of Oxidation of Common Bodies Important in the Steelmaking Process.

"Zmiana swobodnej energii reakcji utleniania cial prostych, majacych znaczenie w procesie wytwarzania stali". Archiwum Gornictwa i Hutnictwa (PAN), No. 1, 1954, pp. 57-69, 11 tabs.

The state of equilibrium for reversible reactions is determined by the value of the change of normal free energy in these reactions. This value may be determined by A. Krupkowski's formula, using thermochemical values. In cases where reacting substances change their allotropic forms or state, it is necessary to note the relative changes of energy. In the authors' calculations, standard thermal and standard entropy of change values were used, these values being determined for the following substances: aluminium, calcium, chromium, magnesium and nickel. The change of normal free energy in reactions of oxidation for certain elements important in steelmaking were also determined. From the values of the change of the normal free energy calculated from circumstantial formulae within the temperature range 1700 to 2000°K, the authors obtained simplified relations, cited in the article, making it possible to calculate with sufficient accuracy the change of free energy in the range of temperature mentioned.

PTAK, E.; BOCHENEK, J.

"Change of Free Energy Involved in the Reactions of Oxidation of Common Compounds, Important in the Process of Steelmaking." p. 57, (ARCHIWUM GORNICTWA I HUTNICTWA, Vol. 2, No. 1, 1954, Warszawa, Poland.)

SO: Monthly List of East European Accessions, (ZEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

CIERNIK, Jan; TRNKA, Vladimir; PTAK, Frantisek

Photographic properties of cyanine dyes. Part 2: Imidacxa
carbocyanines. Chem prum 12 no.10:539-541 0 '62.

1. Fotochema, n.p., Vyzkumny ustav fotograficke chemie,
Blansko.

STREDA, Adolf; PTAK, Frantisek

Objective evaluation of osteoporosis (1). Cesk. rentgenol. 15
no.4:245-250 '61.

1. Vyzkumny ustav chorob revmatických, reditel prof. MUDr. Frantisek
Lenoch Vyzkumny ustav fotografické chemie.
(OSTEOPOROSIS radiography)

PTAK, Josef

"On epeirogenic history of the Saxonian" by Fr. Lotze, J. Wohlburg.
Reviewed by Josef Ptak. Vest Ust geol 38 no.1:60,66 Ja '63.

PTAK, Josef

"Structure of the Triebel cross zone; contributions to the tectonics of the Vogtland slate mountains" by D. Franke.
Reviewed by Josef Ptak. Vest Ust geol 38 no.3:160 My '63.

PTAK, Josef, dr.

Some observations on the mining term "vymytina". Uhli 4 no.9:318-319
S '62.

1. Ustredni ustav geologicky, Praha.

PTAK, Josef

Contribution of E. ... to the study of the tectonics of
Episkop-gemerske rudohorie. Vestn. univ. geol. 39 no.3:231-
232 My '64.

PTAK, J.
Czechoslovakia/Cosmochemistry - Geochemistry. Hydrochemistry, D

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 738

Author: Ptak, J.

Institution: None

Title: Preliminary Report on the Petrography of the Crystalline Black Mountain Rocks Between the Villages Margecan and Kluknava

Original
Periodical: Geol. prace. Zpravy, 1956, No 5, 143-147 (published in Slovakian with summaries in German and Russian)

Abstract: The above-named rocks are part of the Verrukan series (mesozoic and paleogene) and include, on the one hand, various paragneisses, and on the other, granitized and migmatized formations. Granitization was accompanied by marked addition of Na and Ca (feldspars). The processes of chloritoidization and albitization occurred in connection with the formation of sulfidic siderite veins.

Card 1/1

PTAK, J.
Czechoslovakia/Cosmochemistry - Geochemistry. Hydrochemistry, D

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 73⁴

Author: Ptak, J.

Institution: None

Title: Some Notes on the Verrukan Arkoses Between the Villages of Kluknava and Margecan (Black Mountain Ridge)

Original
Periodical: Geol. prace. Zpravy, 1956, No 5, 148-152 (published in Slovakian with summaries in German and Russian)

Abstract: The above-named arkoses consist of quartz, feldspar, muscovite, and biotite with sericite-chloritoid cement. The presence of tourmaline in isolated cases is related to hydrothermal processes accompanying Spish-Gemer mineralization. Further study of tourmaline in Carpathian rocks may solve the question of the relative age of this mineralization.

Card 1/1

PTAL, J.

Manganese ores in the Triassic quartzites of Cierna Hora between the towns of Krompachy and Kluknava, and theories on the origin of sedimentary Mn ores in the Poprad basin. p. 124.
(GEOLOGICKE PRACE; ZPRAVY, No. 9, 1956, Bratislava, Czechoslovakia.)

SC: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957. Incl.

PTAK, J.; RADZO, V.; CINCAROVA, M.

Palgorskite from the magnesite quarry of Dubrava, west of Jelševa, in Slovakia, p.59

Prague, Ustredni ustav geologicky. VESTNIK. Prague, Czechoslovakia, Vol. 34, no. 1
1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

Ptak, J.

Preliminary report on the petrography of the crystalline formations of the Cierna Hora between Krompachy and Kluknava. p. 143. (Geologicke Prace; Zpravy No. 5, 1956)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

PTAK, J.

Some remarks on the verrucano-arkose formations between Kluknava and Krompachy (Cierna Hora Ridge) in connection with the problem of the origin of tourmalines. p. 148. (Geologicke Prace; Zpravy no. 5, 1956.)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

PTAK, Josef

SURNAME (in caps); Given Names

Country: Czechoslovakia

Academic Degrees: /not given/

Affiliation: /not given/

Source: Prague, Vestník Ústředního Ústavu Geologického, Vol XXXVI,
No 2, 1961, pp 317-321.

Data: "February Meeting of Specialists and Technicians of the
Central Institute of Geology."

PTAK, JOZEF

Manganese ore occurrences in quarries of the region
Jerna Hora between Margecany and Kluknava and the
origin of sedimentary manganese ore deposits in the Pordub
Basin. Jozef Ptak (Tech. Hochschule, Kofice, Czech.).
Geol. praca (BRATISLAVA) (Rept. Ser.) 9, 124-6 (1956) (German
summary). — Pyrolusite occurs with barite in the oxidized
part of a barite-siderite-quartz hydrothermal vein.
Michael Fleischer

PTAK, Josef², inz.

Development of mechanization in mine galleries and the use of
tectonic methods in the Ostrava-Karvina Coal District. Uhli 4
no.1:20-21 Ja '62.

1. Ustřední ústav geologický, Praha.

1. Introduction

2. Objectives

Based on the National Conference on Rock Treasure Research in
Prigylzo. Vest. Ust. geol. 37 no. 4: 34-417 1964.

BERNARD, Jan.H.; PTAK, Josef

Mineralization of the Kutna Hora ore type near Pnovany and Plesnice.
Vest ust geol 39 no.5:341-350, 351 S '64.

1. Central Geological Institute, Prague.

CZECHOSLOVAKIA

PTAK, J.

Central Geological Institute (Ustredni ustav geologicky),
Prague

Prague, Casopis pro mineralogii a geologii, No 2, 1964, pp 217-
224

"Small-Scale Tectonics in Bituminous Coal Mines."

PTAK, M. (Ing.)

Poland

Gaszenie plonacych odwiertow--Nafta X/1951

SO: Oil Wells, by Z. Onyszkiewicz, PWSZ, Warsaw 1955, Unclassified.

MISCHKE, Kaziemierz, mgr.,inz.; HOLANSKI, Zygmunt, inz.; PTAK, Marian,
mgr.,inz.; WOJCIK, Jozef, mgr.,inz.; ZECHENTER, Jan, mgr.inz.

A Preliminary instruction on cementing. Prace Inst naft no.69:13-
26 '61.

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622 247 56 622 81

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Plak M. Extinguishing Well Fires

"Gaszzenie płonących odwiertów" Nafta, No. 10, 1951, pp 269-274

7 figs

The putting out of gas and oil well fires is a most difficult and involved problem, requiring careful consideration and preparation of the fire-fighting operation, as well as systematic execution. The author, in reviewing the most frequent causes of fires and the means taken to prevent explosion, quotes a number of the mos. typical means of combating fires in gas and oil wells. He describes a method of extinguishing fires, by means of explosion, in oil wells with continuous eruptive production, with periodically weakening oil eruption, with high oil production at low pressure and with high oil production at high pressure, as well as in gas wells with low production and with random production and pressure. He also gives details of an instance, which occurred at one of the Polish oil fields, of putting out fire in a gas well delivering large quantities of gas at comparatively high pressure in the formation. The fire was brought under control by placing a bent pipe over the casing pipes thus intercepting the flames from the burning gas to the outlet of this pipe. Next

the valves on the side branches fitted to this pipe were opened and the blazing outlet closed by means of a valve, thus causing non-ignited gas to escape through these branches.

PTAK, Włodzimierz

Steroid hormones in the brown adipose tissue. Roczn. Pcm.
akad. med. Gdanskowski 10:253-281 '64.

1. Z Zakładu Patologii Ogólnej i Doswiadczałnej Pomorskiej
Akademii Medycznej (Kierownik: prof. dr med. Janusz Makowski).

PTAK, VLASTIMIL

Ptáček, Vlastimil. Immersibility of semigroups. (Acta Fac. Nat. Univ. Carol., Prague no. 192 (1949), 15 pp. (1949).

A semi-group S is taken to be an associative multiplicative system in which $ax=ax'$ and $xb=x'b$ each implies $x=x'$. It is shown that if S contains two elements a and j such that $aj=a$ (or $ja=a$), then j is the unit of S , and hence that a unit element can be adjoined to S if it possesses none. It is then assumed that S has a unit element. Let Γ be a set of generators of S . The free semi-group on Γ is defined to be the set S^* of elements $\prod_{i=1}^n a_i$, where the a_i are in Γ . Then $S^* \sim S$ under a homomorphism $H: H(a_i)=a_i$ where $a_i \in S^*$. The free group G^* on Γ is the set of elements $\prod_{i=1}^n a_i^{\epsilon_i}$

Let $\mathcal{M}_\alpha$ be the set of elements of G^* of the form $\alpha\beta^{-1}$ where α and β are in S^* and $H(\alpha)=H(\beta)$. Let $[\mathcal{M}_\alpha]$ be the intersection of all subgroups of G^* which contain $\mathcal{M}_\alpha$. It can be shown that, if α and β are in S^* , then $\alpha\beta^{-1}$ in $[\mathcal{M}_\alpha]$ implies $\alpha\beta^{-1}$ in $\mathcal{M}_\alpha$. If $[\mathcal{M}_\alpha]$ is the intersection of all normal subgroups of G^* which contain $\mathcal{M}_\alpha$, then S is immersible in a group if and only if $\alpha\beta^{-1}$ in $[\mathcal{M}_\alpha]$ implies $\alpha\beta^{-1}$ in $\mathcal{M}_\alpha$. Hence, if $[\mathcal{M}_\alpha]=[\mathcal{M}_\beta]$, S is immersible. A semi-group S with unit, such that a, b in S implies that $ua=vb$ for some elements u, v in S , is called an Ore semi-group. It is shown that an Ore semi-group satisfies the condition that $\alpha\beta^{-1}$ in $[\mathcal{M}_\alpha]$ implies $\alpha\beta^{-1}$ in $\mathcal{M}_\alpha$ and is therefore immersible [see O. Ore, Ann. of Math. (2) 32, 463-477 (1931)]. The methods

with generators x and only if there is a homomorphism
of G^* on G which preserves the homomorphism H of S^* on S . these Rev. 2, 7].

P. Krokemister.

Source: Mathematical Reviews,

Vol 12, No. 3.

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PTÁK, VLASTIMIL

Pták, Vlastimil. Proof of a theorem of Ward. Časopis
Pěst. Mat. 76, 217-224 (1951). (Czech)

Given an additive real function $F(J)$ of the m -dimensional Euclidean interval J with the measure $|J|$, let $f(x, \alpha, \epsilon)$ denote the infimum of the ratio $F(J)/|J|$ for intervals J of parameter of regularity $\geq \alpha$ and diameter $< \epsilon$ which contain the point x . The quantity $\inf_{\alpha} \sup_{\epsilon} f(x, \alpha, \epsilon)$ ($0 < \alpha \leq 1, \epsilon > 0$) is termed the lower derivative of $F(J)$ at the point x . The upper derivative is defined similarly. It was proved by A. J. Ward [Fund. Math. 28, 265-279 (1936)] that, in the set in which they are not infinite of opposite sign, these two upper and lower derivatives are almost everywhere finite and equal. The author derives this from a corresponding result for network derivatives, with the help of a simple geometrical lemma, in a straightforward manner.

L. C. Young (Madison, Wis.).

50. Mathematical Review, Vol. XIV, No. 5, May 1953

PTAK, VLASTIMIL

Pták, Vlastimil. **Partially ordered linear spaces.** Časopis
Pěst. Mat. 76, 283-290 (1951). (Czech)
Résumé of basic definitions employed and results ob-
tained in the recent treatise of Kantorovič, Vulih, and
Pinsker [Functional analysis in partially ordered spaces,
Moscow-Leningrad, 1950; these Rev. 12, 340].
E. Hewitt (Seattle, Wash.).

SO: Mathematical Review, Vol. XIV, No. 5, May 1953

PTAK, Vlastimil (Praha).

~~Mathematical groups~~
Imbedded semi-groups. Chekh.mat.zhur. 2 no.3:247-271 N '52.
(MLRA 7:2)
(Groups, Theory of)

PTAK, Vlastinil (Praga)

Complete topological linear spaces [with summary in English].
Chekh.mat.zhur. 3 no.3:285-290 8 '53. (MLRA 7:5)
(Spaces, Generalized) (Topology)

PTAK, Vlastimil (Praga)

~~Complete topological linear spaces~~

Complete topological linear spaces [with summary in English].
Chekh.nat.zhur. 3 no.4:301-364 D '53. (MLRA 7:5)

(Spaces, Generalized)

PTÁK, Vlastimil. On Frobenius' Theorem. Časopis Pěst.

Mat. 78 (1953), 207-212. (Czech)

This paper is the result of a seminar on Zassenhaus' Lehrbuch der Gruppentheorie [Bd. I, Teubner, Leipzig-Berlin, 1937]. The author states that in this book at a number of places he would prefer a more leisurely exposition. As an instance he offers a detailed proof ab ovo of the theorem of Chap. I, § 10: Let G be a finite group of order N ; let n be a natural number; let T be the class of all conjugates of an element $g \in G$ and h the number of elements in T . Let $A(T, n)$ be the number of different roots $x \in G$ of the equation $x^n = c$ where $c \in T$. Then $A(T, n)$ is divisible by the g.c.d. (hn, N) . This is proved by induction with respect to N and the following three cases are considered separately: (1) g is not an element of the centre C of G ; then $(hn, N) = A(T, n)$. (2) $g \in C$, but $g \neq 1$; the proof is based on the lemma: Let r be the order of c in G and p_i those prime factors of n which are not divisors of r ; let e_i be the highest positive integer such that $p_i^{e_i} | n$. Let $\prod_i p_i^{e_i} = l$ and $n = kl$. Then $k | A(c, n)$. (3) $g = 1$.

H. Schwerdlfeger (Melbourne).

Pták, Vlastimil

Pták, Vlastimil. Immersibility of semigroups. Časopis
Pest. Mat. 78 (1953), 259-261. (Czech)
A short account of the extract published by the author
in Čechoslovack. Mat. Z. 2 (77), 247-271 (1952) [MR 15,
598] from his article with the same title in Acta Fac. Nat.
Univ. Carol. Prague no. 192 (1949) [MR 12, 155].

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PTAK, Vlastimil (Praha)

Weak compactness in convex topological linear spaces [in English with
summary in Russian]. Chekh.mat.zhur. 4 no.2:175-186 My '54. (MIRA 7:6)
(Spaces, Generalized)

Ptak, Vlastimil

✓ Ptak, Vlastimil. Compact subsets of convex topological linear spaces. Czechoslovak Math. J. 4(79) (1954), 51-74. (Russian. English summary)

In a complete uniform space, the closure of each precompact subset is compact; for metric spaces, this condition is equivalent to completeness. The author shows that the equivalence fails in more general spaces by constructing, in fact, a noncomplete locally convex topological linear space X such that for each precompact ACX , the symmetric closed convex hull A^{**} of A is compact. This material is closely related to that of an earlier paper by the author [same J. 3(78) (1953), 301-364; MR 16, 262], and to the notion of B -completeness discussed therein. In extension of some results of that paper, the author shows here that if E is a complete locally convex topological linear space and E' its dual, then in E' the topology of uniform convergence on compact sets is the weakest locally convex topology for E' which agrees with the weak topology on every weakly compact subset of E' . V. L. Klee (Seattle, Wash.)

~~PLAK, VLASTIMIL~~

Plak, Vlastimil. Concerning spaces of continuous functions. Czechoslovak Math. J. 5(80) (1955), 412-431.
(Russian summary)

Let T be a completely regular topological space, and let $C(T)$ be the linear space of all real-valued continuous functions on T . Let hT be the unique Q -space such that $TChT$, $T=hT$, and every function in $C(T)$ admits a continuous extension over hT . [For the construction and elementary properties of hT , see Hewitt, Trans. Amer. Math. Soc. 64 (1948), 45-99; MR 10, 126.] Thus $C(T)$ and $C(hT)$ are algebraically and order-wise isomorphic. Now topologize $C(T)$ by the pseudo-norms $\|f\|_K = \max\{|f(t)| : t \in K\}$, where K runs through all compact subsets of T . Let $M(T)$ be the space of all linear functionals on $C(T)$ that are continuous in this K -topology. It is clear that $M(T) \subset M(hT)$, and that the inclusion may be proper. The theme of this paper is that a functional $r \in M(hT)$ still has some sort of continuity that enables one to describe the elements of $M(hT)$ in terms of $C(T)$ alone. (Reviewer's note. Plainly some such characterization must exist, since hT , and hence its compact subsets, can be identified by the algebraic structure of $C(T)$.) The p -topology of $C(T)$ is the

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PTAK, VLASTIMIL

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topology of $C(T)$ regarded as a subset of the Cartesian product R^T , R being the real numbers. The weak topology of $C(T)$ is the usual weak topology defined in terms of the elements of $M(T)$. The first main theorem is the following. Let r be a linear functional on $C(T)$. Then the following conditions are equivalent: (1) $r \in M(hT)$. (2) r is p -continuous on every symmetrical convex and p -compact subset of $C(T)$ that contains a countable dense subset. (3) r is weakly continuous on every symmetrical convex and p -compact subset of $C(T)$ that contains a countable dense subset. (4) r is p -continuous on every symmetrical convex and weakly compact subset of $C(T)$ that contains a countable dense subset. (5) r is weakly continuous on every symmetrical convex and weakly compact subset that contains a countable dense subset. A second, analogous theorem is also proved. The proof is based on an earlier paper of the author's [Czechoslovak Math. J. 4 (9) (1954), 175-186; MR 16: 595].

The author also studies hT as a subset of the Čech-Stone compactification βT . He calls a point $s \in \beta T$ a Hewitt point if every $f \in C(T)$ admits a continuous extension over $T \cup \{s\}$. Then hT , the Hewitt closure of T ,

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PTAK, VLASTIMIL

is the set of all Hewitt points of βT . A similar characterization of hT has been given by Gillman, Henriksen, and Jerison [Proc. Amer. Math. Soc. 5 (1954), 447-455, p. 450; MR 16, 607]. The author also gives a simple and interesting example of a completely regular space that is not countably compact and in which all continuous real-valued functions are bounded.

E. Hewitt.

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PTAK, VLASTIMIL

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Ptak, Vlastimil. Two remarks on weak compactness. Czechoslovak Math. J. 5(81) (1955), 532-545. (Russian summary)

Let X be a complete, locally convex, topological linear space over the real number field. Let $L(X)$ be the space of all continuous linear functionals on X , and let $F(L(X))$ be the space of all linear functionals (not necessarily continuous) on $L(X)$. Let X be embedded in $F(L(X))$ in the usual way. Main theorem. Let B be a bounded closed convex subset of X . Then the following properties of B are equivalent. (1) If $r \in F(L(X))$, r is in the closure of B , and $\{y_n\}_{n=1}^{\infty}$ is any sequence of elements of $L(X)$, then there is a $b \in B$ such that $by_n = ry_n$ ($n = 1, 2, 3, \dots$). (2) If

Crook, Vladimir

$\lambda_1, \dots, \lambda_m$, the inequality

$$\sum_{j=1}^m \lambda_j \beta_j \leq \sup B \left(\sum_{j=1}^m \lambda_j \gamma_j \right)$$

holds. Then there is a point $b \in B$ such that $b_{\gamma_n} = \beta_n$ for $n=1, 2, 3, \dots$. This theorem generalizes a result due to Floyd and Klee (Proc. Amer. Math. Soc. 5 (1954), 655-656).

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FIEDLER, M.; PTAK, V.

On aggregation in matrix theory and its application to numerical
inverting of large matrices. Bul Ac Pol mat 11 no.12:757-759
'63.

1. Institute of Mathematics, Czechoslovakian Academy of Sciences.

PCA, 7.

On a review of Mazur and Grlisz. In English. p. 305.
(STUDIA PATENTICA. Vol. 15, no. 3, 1956. Warszawa, Poland)

SC: Monthly List of East European Accessions (MEAL) 1/1. Vol. 6, no. 12, Dec. 1957.
Encl.

PTAK, Vlastimil

"Concerning the Convergence of the Generalized Seidel's
Procedure for the Solution of Systems of Linear Equations."
Math. Nachrichten 15 (1956), p. 31-38.

PTAK, Vlastimil

"A Remark on the Jordan Normalform of Matrices," Acta Sci Math,
Szeged 17 (1956), p. ~~31-38.~~

190-194

PTAK, Vlastimil and ORLICZ, W.

"Some Remarks on Saks Spaces." *Studia Mathematica* 16 (1957),
p. 56-68.

AUTHORS: Krupkovskiy, A., Ptak, V., Bl'ek-Bol'ten, A. 78-3-4-19/38

TITLE: Thermodynamic Functions in Binary Systems (Termodinamicheskiye funktsii v binarnykh sistemakh)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 4, pp. 939-944 (USSR)

ABSTRACT: In binary systems different phases exist at various temperatures. For explaining the phase equilibria thermodynamic functions were used. For binary solutions the following function holds:

$$F' = N_1 \bar{\mu}_1 + N_2 \bar{\mu}_2$$

$\bar{\mu}_1, \bar{\mu}_2$ = chemical potentials of the substances 1 and 2 in solution,
 N_1, N_2 = concentration of substances 1 and 2, given in mol.
 For mixtures the following function applies:

$$F' = n_1 \mu_1 + n_2 \mu_2$$

μ_1, μ_2 = chemical potential of pure substances 1 and 2
 n_1, n_2 = concentration of substances 1 and 2, given in mol.
 The values for the individual thermodynamic functions in the system Zn-Cd at temperatures of 538°, 600°, 700° and 800°K

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Thermodynamic Functions in Binary Systems

78-3-4-19/38

were determined.

Furthermore the values for the free energy for liquid solutions and mixtures in the system Zn-Cd were determined and the connection between these function as well as the composition at 538°, 600°, 700° and 800°K were graphically represented.

By using thermodynamic functions also the systems Ag-Cu, Cu-Ni and Zn-Pb were investigated.

There are 5 figures and 10 references, 6 of which are Soviet.

ASSOCIATION: Institut tekhniki Pol'skoy Akademii nauk, otdeleniye metallov
(Technical Institute, Department of Metals, Polish AS)

SUBMITTED: June 25, 1957

Card 2/2

PTAK, V.

Plák, Vlastimil. On the absolutely convex envelope of a set in a finite dimensional vector space. Časopis Pěst. Mat. 83 (1958), 343-347. (Czech. Russian and English summaries)

1-FW

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Let A be a compact subset of an n -dimensional vector space. Then the symmetrical convex envelope of A is compact and consists of all vectors of the form $\sum_{i=1}^n \lambda_i a_i$, where $a_i \in A$ and the numbers λ_i fulfill the inequality $\sum_{i=1}^n |\lambda_i| \leq 1$.

From the author's summary

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PTAK, Vlastimil

"On Approximate Solutions of Linear Equations in Banach Spaces."
Journal for the Cultivation of Mathematics. 83 (1958), p. 389-398.

FTAK, Vlastimil

"A Remark on Approximation of Continuous Functions." Czech. Math.
Journal 83 (1958), p. 251-256.

PTAK, Vlastimil

"On Approximation of Continuous Functions in the Metric
Czech. Math. Jour. 83 (1958), p.267-273,

$$\int_a^b |x(t)| dt,$$

PTAK, Vlastimil

"On a Combinatorial Theorem and its Application to Nonnegative Matrices," Czech. Math. Jour. 83 (1958) p. 487-495.

PTAK, Vlastimil and SEDIACEK, J.

"On the Index of Imprimitivity of Nonnegative Matrices."
Czech. Math. Jour.⁸³ (1958) p. 496-501

PTAK, Vlastimil

"Biorthogonal Systems and Reflexivity of Banach. Spaces."
Czech. Math. Journal, 84, (1959) p.319-326.

PTAK, Vlastimil

"Completeness and the Open Mapping Theorem." Bull. Soc. Math.
de France. 86 (1958), p.41-74.

PTAK, Vlastimil

"On the Closed Graph Theorem." Czech. Math. Jour. 24, (1959)
pp. 523-527.